



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/583,192	04/05/2007	Thomas Fussinger	941-012569-US (PAR)	6537
2512	7590	01/06/2011		
Perman & Green, LLP				
99 Hawley Lane				
Stratford, CT 06614				
EXAMINER				
CHOW, YUK				
ART UNIT		PAPER NUMBER		
2629				
MAIL DATE		DELIVERY MODE		
01/06/2011		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/583,192

Applicant(s)

FUSSINGER, THOMAS

Examiner

YUK CHOW

Art Unit

2629

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 October 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) 28 and 30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27, 29 and 31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-942)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 6/14/2006/7/20/2010
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant elects Species 2, claims 1-27, 29 and 31, but timely traversed the restriction (election) requirement in the reply filed on 10/20/2010. The traversal is on the ground(s) that embodiments are similar and both operate to enter character in the same way. This is not found persuasive because the character entering sequences will be different for 5-way and 4-way input. There is a search burden because the entering sequence variation.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 28 and 30 has been withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected Species, there being no allowable generic or linking claim.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 8-27 and 29 are rejected under 35 U.S.C. 102(e) as being anticipated by Watanabe (US 6,963,332).

As to **claim 1**, Watanabe discloses a method for entering data in an electronic terminal having a four-way input device with a center position and a sensor associated with each of the four ways, the method comprising the steps of:

allocating a data value (Fig. 2(output)) to each of the four possible (Fig. 2(C1, C4, C7 and C10) input device movement sequences that comprise a movement of the input device from the center position in one of the four ways followed by a return of the input device to the center position (see Fig. 9, movement sequence 1-3 which return the input device to the center position);

allocating a data value to each of the eight possible input device movement sequences that comprise a movement of the input device from the center position in one of the four ways followed by a movement of the input device in another of the four ways without passing through the center position (see Fig. 9, sequence 4-6 is followed without passing through the center);

detecting the input device movement sequences with the sensors associated with the four ways (See Fig. 16(1702)); and

entering the data allocated to an input device movement sequence upon detection by the sensors of the input device movement sequence concerned (see Fig. 21(2203)).

As to **claim 8**, Watanabe discloses a method according to claim 1, wherein the input device further comprises a center sensor associated with activation of the input device in the center position (see Fig. 17(1801)).

As to **claim 9**, Watanabe discloses a method according to claim 8, wherein a data value entry having a plurality of characters associated therewith is disambiguated by the number of activations of the input device in the center position that follows the sequence of the input device movement to which the data value concerned is allocated (see Fig. 3, sequence (1) is center position C0).

As to **claim 10**, Watanabe discloses a method according to claim 1, wherein the input device movement sequences and the characters or commands associated therewith are shown on the terminal as hard or soft labels proximate to the input device (see Fig. 13 and 26, the input device uses for Japanese or English).

As to **claim 11**, Watanabe discloses a method according to claim 1, wherein the four ways are arranged orthogonally, and the digits associated with the input device movement sequences are arranged in a clockwise sequence around the input device (See Fig. 26, digits associated with the input device from C5 to C7 are arranged in a clockwise around the input device).

As to **claim 12**, Watanabe discloses a method according to claim 1, wherein a tone is sounded for each sensor activation, preferably followed by a input confirmation when a data value is successfully entered (Fig. 4a(406)), or followed by a rejection tone when the data value entry failed (Fig. 4a(405)).

As to **claim 13**, Watanabe discloses a method according to claim 8, the entry of a data value is confirmed by an activation of the center sensor (see Fig. 17(1801)).

As to **claim 14**, Watanabe discloses a method according to claim 1, wherein the input device is a four-way joystick (see Fig. 1a(11)).

As to **claim 15**, Watanabe discloses a method according to claim 1, wherein the input device is a four-way pad (see Fig. 23a).

As to **claim 16**, Watanabe discloses a mobile communication terminal comprising:

- a display (fig. 1(30));

- a four-way input device (Fig. 1(10, 11)) with a middle position and a sensor associated with each of the four ways;

- a processor unit (Fig. 1(20)) monitoring the activation of the sensors and controlling the information shown on the display;

- a data value being assigned to each of the four activation sequences that comprise the activation of one of the four sensors followed by a return to the middle position in which none of the four sensors is active (see Fig. 9, sequence 4-6 is followed without passing through the center); and

- a data value or being assigned to each of the eight activation sequences that comprise the activation of one of the four sensors and whilst the sensor concerned is active followed by the activation of one of the other sensors (see Fig. 9, movement sequence 1-3 which return the input device to the center position);

the processor unit upon detection of an activation sequence having a data value allocated therewith accepting the data value concerned as entered (Fig. 11a(1108, 1109).

As to **claim 17**, Watanabe discloses a mobile communication terminal according to claim 16, wherein the terminal has a plurality of operation modes, comprising a mode for numerical entry (fig. 26), in which digits are allocated to the data values, and/or a mode for text entry, in which a pluralities of letters of the alphabet are assigned to the data values (fig. 1b).

As to **claim 18**, Watanabe discloses a mobile communication terminal according to claim 16, wherein the terminal comprises a menu structure and the processor allocates navigational commands to the data values when the menu is entered (See Fig. 4a(401-409)).

As to **claim 19**, Watanabe disclose a mobile communication terminal according to claim 17, wherein the simultaneous activation of a first predetermined pair of outer sensors is associated with a clear or backspace function (Fig. 20(2106)) in the mode for numerical entry and the a mode for text entry.

As to **claim 20**, Watanabe discloses a mobile communication terminal according to claim 17, wherein the simultaneous activation of a second predetermined pair of outer sensors is associated with a change in the characters (Fig. 20(2107)) or commands (Fig. 20(2109)) allocated to the data values.

As to **claim 21**, Watanabe discloses a mobile communication terminal according to claim 16, further comprising a center sensor (Fig. 17(1801)) being associated with the

middle position, the function of the center sensor being controlled and displayed by the processor unit in a dedicated area of the display (see Fig. 25 a-b).

Regarding claims **22- 26**, limitations within is similar to claims 16-20. Therefore, same rejection applies.

Regarding method **claims 27, 29**, limitation within is similar to claim 1 and claim 16. Therefore, same rejection applies.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2-7 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe in view of Coates et al (US 7,352,363).

As to **claim 2**, Watanabe discloses a method according to claim 1, wherein the data values have a character associated therewith (Fig. 13, data 1402 has character S associated with it).

However, Watanabe's disclosure does not teach each data value has a plurality of characters associated therewith.

Coates discloses a single finger method for text entry via keypad wherein teaches each pad have a plurality of letters associated therewith (see Fig. 1).

It would have been obvious to one ordinary skill in the art at the time of invention was made to incorporate a plurality of letters associated with each key as in Coates into the method of entering data as in Watanabe, because this uses fewer keys and implements the short-cut input method (see Coates Abstract).

As to **claim 3**, Watanabe and Coates disclose a method according to claim 2, wherein a plurality, preferably eight, of the possible twelve different data values (see Watanabe Fig. 2(C1-C12) each have a plurality of preferably three or four letters of the alphabet associated therewith (see Coates Fig. 1, each keypad have three of four letters associated with it).

As to **claim 4**, Watanabe and Coates disclose a method according to claim 3, wherein the letters of the alphabet are distributed over eight different data values as follows: abc, def, ghi, jkl, mno, pqrs, tuv, and wxyz (see Coates Fig. 1).

As to **claim 5**, Watanabe and Coates disclose a method according to claim 4, wherein the character "space" is assigned to one of the other data values (see Fig. 1, "space" is assigned to "***").

As to **claim 6**, Watanabe and Coates disclose a method according to claim 2, further comprising the step of processing the data values having a plurality of characters is associated with a predictive editor program for generating an output containing words matching a string of received data values having a plurality letters associated therewith (see Coates Col. 3 lines 10-21).

As to **claim 7**, Watanabe and Coates disclose a method according to claim 3, wherein a digit is associated with the data values having a plurality of preferably three or

four letters of the alphabet associated therewith when the duration of the activation of the last switch in the input device movement sequence allocated with the data value concerned exceeds a threshold (see Coates Fig. 5(73, 75)).

As to **claim 31**, Watanabe and Coates disclose a method according to claim 2, wherein ten of the possible twelve different data values have digits associated therewith, preferably comprising all of the digits are 0 to 9 (see Coates Fig. 2-3).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YUK CHOW whose telephone number is (571)270-1544. The examiner can normally be reached on 8-6 M-TH E.T..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Quan-Zhen Wang can be reached on (571) 272-3114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Y. C./
Examiner, Art Unit 2629

/Quan-Zhen Wang/
Supervisory Patent Examiner, Art Unit 2629